What is claimed is:

1. A method of identifying a cell, tissue or nucleus, comprising collecting information on the methylation pattern of DNA isolated from said cell, tissue or nucleus and analyzing the resultant information.

2. A method of using information on the methylation pattern of DNA isolated from a test cell, tissue or nucleus as an indicator for producing a cell, tissue or nucleus of interest.

3. A method of specifying gene regions indispensable for producing a cell, tissue or nucleus of interest, using information on the methylation pattern of DNA isolated from a test cell, tissue or nucleus as an indicator.

4. A computer-readable record medium in which a program that permits a computer to function as an identification system for cells, tissues or nuclei has been recorded, said identification system comprising:

(a) means for analyzing information on the methylation pattern of DNA isolated from a test cell, tissue or nucleus; and

(b) means for identifying the cell, tissue or nucleus using the analysis results as an indicator.